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Mycological Bulletin

No. 78

W. A. Kellerman, Ph. D., Ohio State University

Columbus, Ohio, June, 1907.

EDITOR'S NOTES.

We are indebted to Miss Hyde for an interesting account and illustrations of a little bark-inhabiting fungus.

Then Mr. Smith, teacher in the High School of Akron, places us under obligation also. He gives us an account of a rare plant. We have seen many of his photographs of fungi, besides the one that illustrates his *Peziza*. We never saw finer ones—strong language but justifiable. We will insist that he furnish may of them for use in future numbers of the Bulletin.

Mushroom literature is abundant and we resume our notes in that field, even at the risk of bordering strongly on the technical. Professor Atkinson has in the past few years described many new species. His descriptions are very full and careful and therefore we desire to copy as many of them as space will permit.

SCLEROTINIA TUBEROSA; TUBEROUS PEZIZA.

G. D. SMITH, AKRON, OHIO.

This is one of the very rare *Pezizas* that produces a sclerotium at the base, and has been found but few times in this country. It is said to be much more common in Europe. The photograph illustrates very nicely the general appearance of the plants. They grow in rich, shady woods, sometimes unprotected, but more often near stumps, logs, or the projecting roots of trees. I have never found them except in early spring, from April 15 to May 20. These shown in the photograph (Fig. 249) were found April 30, in a ravine about two miles north of Akron, Ohio. I noticed that they were very sensitive to different temperatures in the explosion of their spores. When I would hold them in the warm sun for a minute and then pass them suddenly into the shade there would be a cloud of spores sent forth. I also noticed that a sudden breeze would produce the same result. I then tried blowing my breath on them and the response was still greater. This I repeated

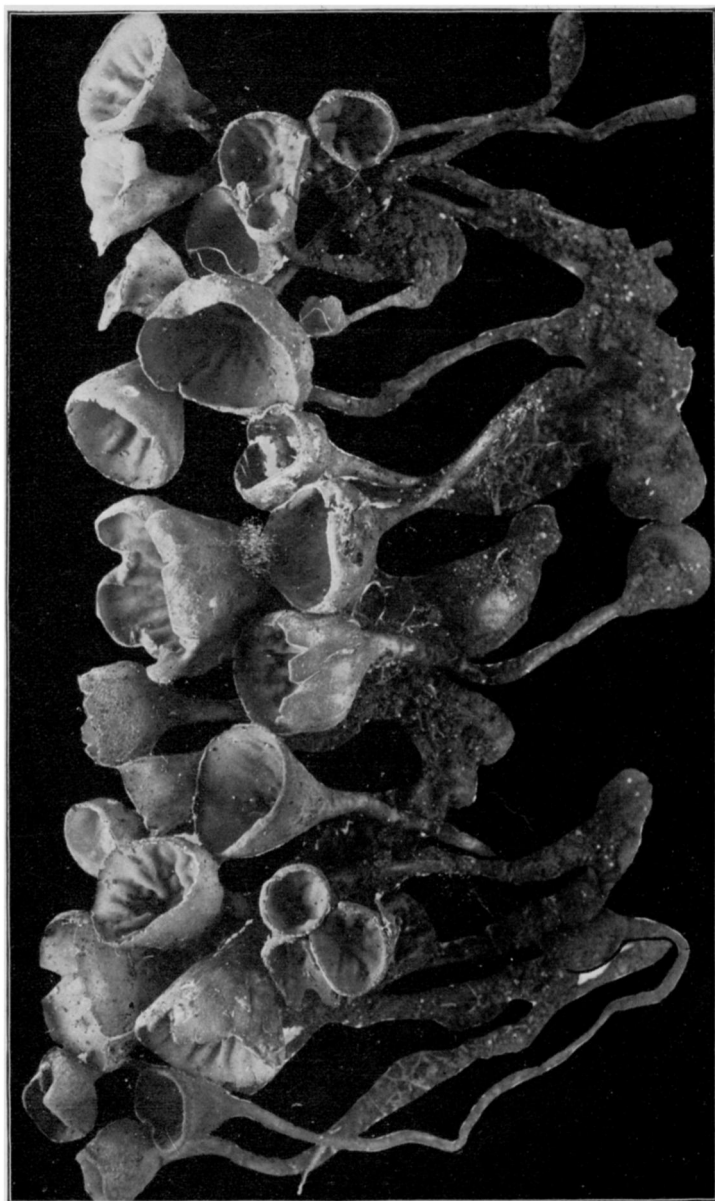


Fig. 349.—*SCLEROTINIA TUBEROSA*. Phot. G. D. Smith, Akron, Ohio.

several times, the results diminishing with each repetition until they finally ceased to respond. I now noticed that the spore surface that had been most active in exploding the spores had become quite moist.

After they had rested for some minutes I repeated the experiment with the same result but not so strong as at first. I then put them in a closed box and did not open it until I was inside a warm room. When I removed the lid a dense cloud of spores arose to meet my gaze. I again tried blowing on them and found them very active until exhausted. They vary in color from tan to a rich brown.



A LITTLE CORTICICOLOUS FUNGUS.

EDITH HYDE.

At the request of the editor of the Mycological Bulletin I have studied and figured an interesting little fungus that grows on bark as indicated in the title. The specimens were collected in Jamaica by A. E. Wight and our material was received from Dr. Farlow, of Harvard University.

The botanical name of the plant is *Sphaerostilbe cinnabarina*; it belongs to the large group called the *Ascomycetes*. In this group the fruit or spore-bearing portion may be open and somewhat cup-shaped or saucer-shaped; or it may be nearly or quite closed and more or less globular or pear-shaped. In the first case the name *Discomycetes* is applied to the plants; in the second case they are called *Pyrenomycetes*. It is to the latter group that the *Sphaerostilbe* belongs.

The dry specimens examined were of a dark reddish-brown color, the lower portion of the stem being much darker than the upper portion. The tiny plants are clustered on the bark not densely, but as trees in an open woods, as shown in Figure 2 at a. It will be seen that the upright stem is not the entire plant; the lower portion is made up of a number of globular or slightly pear-shaped bodies clustered about the base of the upright stems (see fig. b). These are the *perithecia*, a greek word which means pockets; these pockets or perithecia, contain spores as will be explained presently.

An inspection of the figures already referred to, will show that the upright portion or stem is decidedly enlarged at the upper end and here also spores are borne.

There are two kinds of spores borne by this *Sphaerostilbe*, very different each from the other, but both microscopic. Covering the upper end or head of the upright stem are myriads of little threads which are directed outwards and on the tip of each is borne a small body called a conidium. Each one is oval or very slightly egg-shaped. The threads, which are really tiny tubes, are called *conidiophores*; the word means bearers of the *conidia*.

The drawing marked c in the figure shows two conidia very much enlarged. The one at d is a diagram and shows the real structure of the conidiophore, or rather the stem or stipe which bears the multitude of conidiophores. As can be seen, there are innumerable threads or tiniest tubes joined side by side and compacted into a rather firm stem or stipe. These spread out and seem to be multiplied to form the head; the outer fringe of hairs produce the spores as has been explained.

The other kind of spores is to be sought for in the perithecia or globular pockets forming the base of the plant and flanking the upright stem. Unfortunately they were sterile in the specimens examined. But a copy of such spores was taken from *Pflanzenfamilien*, a large illustrated